



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,205	06/01/2006	Isao Ochi	2006_0853A	2326
513	7590	04/27/2011		
WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503			EXAMINER	KRAVETS, JULIYA
		ART UNIT	PAPER NUMBER	
		1781		
		NOTIFICATION DATE	DELIVERY MODE	
		04/27/2011	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[ddalecki@wenderoth.com](mailto:ddalecki@wenderoth.com)  
[coa@wenderoth.com](mailto:coa@wenderoth.com)

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,205	<b>Applicant(s)</b> OCHI, ISAO
	<b>Examiner</b> JULIYA KRAVETS	<b>Art Unit</b> 1781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 3-6 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 3-6 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 06/01/2006, 09/15/2006
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date, \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

**Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/20/2010 has been entered.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1 and 3-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.**

4. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. Regarding claim 1, it is not clear how "sugar in the form of a liquid" can be made. The working examples use water and it appears that water or would be excluded by the "consisting of" claim language.

6. If you mixed molten sugar (sugar in the form of a liquid) and protein, given the temperature needed to make sugars molten would burn the protein. The only way this could work is with a large component of glycerol and or glycol, pretty much the other sugar alcohols are solids. Furthermore, it is not clear if sugar alcohols can be present as these are related to sugars but still different.

7. It is not clear how one would be able to make liquid sugar without the addition of other components all of which appear to be precluded as sugar by itself is a solid.

8. As such, it is not clear one of ordinary skill in the art how to create a sugar in the form of a liquid, and thus does not teach how to prepare the plastic mixture as claimed.

9. Claims 3-6 are rejected for failing to correct the deficiencies of claim 1.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. **Claims 1 and 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

12. It is not clear what is meant to be included or precluded by the term "sugar in the form of a liquid." It is not clear if additional components such as water or low molecular weight sugar alcohols are included or precluded by the "consisting of" claim language.

#### **Claim Rejections - 35 USC § 103**

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. **Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (U.S. 5,501,491) in view of Nagao et al. (JP 2001-157545 - Abstract and English Translation) as evidenced by Alzamora et al.**

Art Unit: 1781

16. As discussed above, It appears that water may intend to be excluded by the "consisting of" claim language based. For purposes of examination, the examiner takes the position that "sugar in the form of a liquid" must have some other component to make it a liquid.

17. Ando et al. teaches a biodegradable molded article, that uses "a mixture in the form of a slurry obtained from mixing a soybean protein, sugar and water", where the mixture is subjected to electroconductive heating. (abstract) This biodegradable molded article can function similar to a plastic type mixture (column 1, lines 6-15). While the moldable plastic like mixture consists of soybean, sugar, and water, the biodegradable molded article can also include "wheat powder, etc., or materials including egg, dairy products, etc., and mixtures of the above" and starches such as wheat (column 6, lines 40-50).

18. Although Ando et al. does not disclose if the sugar and water were added separately or added together as a sugar in the form of a liquid, the examiner takes the stance that either way using a sugar water or sugar and water would create a sugar water substance when mixed.

19. However, Ando et al. does not explicitly teach a particular range of the concentration of ingredients that can be used in creating the biodegradable moldable article. Thus, one of ordinary skill in the art would be motivated to search for a teaching of a moldable biodegradable product which suggests a specific composition of a soybean, sugar and liquid that is added to a wheat flour or wheat dough raw materials.

20. Nagao et al. teaches a non sugar cake doughnut that is obtained by mixing a powder mixture containing preset amount of sugar alcohol and/or dextrin and soybean protein powder and/or egg powder with wheat flour (title). The composition is disclosed as "a powder mixture

Art Unit: 1781

containing 15-45 mass parts (mass pts.) of sugar alcohol and/or dextrin and 2-6 mass pts. of soybean protein powder and/or egg powder added to 100 mass pts. of wheat flour." (Abstract)

21. Since Ando et al. teaches a process for producing a moldable biodegradable product that uses a plastic like, moldable mixture consisting of soybean protein, sugar and liquid, and can be added to wheat dough, one of ordinary skill in the art would look to find a teaching of a recipe for a moldable wheat dough product that uses these ingredients. One of ordinary skill in the art at the time the invention was made would find it obvious to use the composition of soybean protein, sugar and liquid added to wheat dough as taught by Nagao et al, in order to create the moldable product of Ando et al.

22. Regarding claim 1, Nagua et al. teaches that the composition can contain soybean protein of 6 mass pts. and a sugar alcohol of 15 mass pts., which provides 28.6% soybean protein by weight of the plastic mixture. Also, this composition provides 71.4% sugar alcohol (sugar in the form of liquid) in the plastic mixture.

23. Regarding claim 3, as evidenced by Alzamora et al., a sugar alcohol, such as sorbitol of 40% (w/w) or more, has a water activity value of less than 0.95.

24. Regarding claim 4, a mixture as disclosed by Nagao et al. of, for example, 15 parts sugar alcohol, 6 parts soybean protein, and 100 parts wheat flour would provide for a composition which contains 4.96% soybean protein by weight.

25. Regarding claim 5, Ando et al. discloses that the mixture is heated. (abstract)

26. Regarding claim 6, Ando et al. discloses that "Fats and oils, such as vegetable oils, animal fats, processed fats, and mixtures of the above" may be used. (column 7, lines 37-38)

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIYA KRAVETS whose telephone number is (571)270-5681. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571)272--1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 1781

/J. K./  
Examiner, Art Unit 1781